IN THE CLAIMS

1. (Currently Amended) A tandem gas seal assembly for forming a seal between a rotor and a casing of a rotary machine, the tandem gas seal comprising:

two sealing stages for mounting axially adjacent to one another ~~on~~ in the rotary a machine ~~rotor~~, each of the sealing stages comprising a rotating sub-assembly for mounting on the rotor and a stationary sub-assembly for mounting in the casing,

wherein:

each ~~the~~ rotating sub-assembly of the two sealing stages ~~are~~is totally separable from one another and each stationary sub-assembly of the two sealing stages is totally separable from one another,

each of the two stages is capable of functioning as a seal when separated from the ~~each~~ other, and

mating formations formed at adjacent axial ends of each of the rotating sub-assembly of the two sealing stages to maintain the two sealing stages in axial alignment with one another.

Claim 2 (Cancelled)

3. (Currently Amended) The tandem gas seal assembly of claim ~~2~~1, wherein the mating formations include an annular collar projecting axially from an axial end of the rotating sub-assembly of a first ~~stage~~ of the two sealing stages and the annual collar fitting over a cylindrical end region of rotating sub-assembly of the ~~a~~ second ~~stage~~ of the two sealing stages.

4. (Currently Amended) The tandem gas seal assembly of claim 3, further comprising: means for effecting a gas tight seal between the mating formations of each rotating assembly of the two sealing stages.

5. (Original) The tandem gas seal assembly of claim 1, wherein each of the two sealing stages is dynamically balanced separately from the other of the two sealing stages.

6. (Original) The tandem gas seal assembly of claim 1, wherein the two sealing stages directly abut one another and are retained on the rotor by means of a lock nut applying an axial force to only an outer of the two sealing stages.

7. (Currently Amended) A rotary machine comprising:

a rotor;

a casing; and

a tandem gas seal for forming a seal between ~~a~~ the rotor and the ~~a~~ casing of the ~~a~~ rotary machine, the tandem gas seal including:

two sealing stages mounted axially adjacent to one another in the rotary machine, each stage comprising a rotating sub-assembly mounted on the rotor and a stationary sub-assembly mounted in the casing,

wherein

each of the rotating sub-assembly of the two sealing stages is totally separable from one another and each of stationary sub-assembly of the two sealing stages is totally separable from one another,

each of the two sealing stages is capable of functioning as a seal when separated from the other stage, and

mating formations formed at adjacent axial ends of each rotating sub-assembly of the two sealing stages to maintain the two sealing stages in axial alignment with one another

~~two sealing stages for mounting axially adjacent to one another on a machine rotor, wherein the two stages are totally separable from one another and each of the two stages is capable of functioning as a seal when separated from each other.~~

Claim 8 (Cancelled)

9. (Currently Amended) The rotary machine of claim ~~8~~7, wherein the mating formations include an annular collar projecting axially from an axial end of the rotating sub-assembly of a first ~~stage of~~ the two sealing stages and the annual collar fitting over a cylindrical end region of the rotating sub-assembly of the ~~a second stage of~~ the two sealing stages.

10. (Currently Amended) The rotary machine of claim 9, wherein the tandem gas seal further comprises ~~:~~means for effecting a gas tight seal between the mating formations of each rotating assembly of the two sealing stages.

11. (Original) The rotary machine of claim 7, wherein each of the two sealing stages is dynamically balanced separately from the other of the two sealing stages.

12. (Orginal) The rotary machine of claim 7, wherein the two sealing stages directly abut one another and are retained on the rotor by means of a lock nut applying an axial force to only an outer of the two sealing stages.

13. (Currently Amended) A tandem gas seal assembly for forming a seal between a rotor and a casing of a rotary machine, the tandem gas seal comprising:

a first sealing stage and a second sealing stage, where each of the first sealing stage and the second sealing stage are adapted for mounting axially adjacent to one another on a machine rotor, each of the first sealing stage and the second sealing stage includes a rotating sub-assembly for mounting on the rotor and a stationary sub-assembly for mounting in the casing

wherein

each rotating sub-assembly of the first sealing stage and the second sealing state is totally separable from one another and each stationary sub-assembly of the two stages is totally separable from one another,

each of the first sealing stage and the second sealing stage is capable of functioning as a seal when separated from the other stage, and

mating formations formed at adjacent axial ends of the rotating sub-assembly of the first sealing stage and the rotating sub-assembly of the second sealing stage to maintain the first sealing stage in axial alignment with the second sealing stage.

~~wherein each of the first sealing stage and the second sealing stage are totally separable from one another, and~~

~~wherein each of the first sealing stage and the second sealing stage are capable of functioning as a seal when separated from each other.~~.

Claim 14 (Cancelled)

15. (Currently Amended) —The tandem gas seal assembly of claim ~~14~~13, wherein the mating formations include an annular collar projecting axially from an axial end of the rotating sub-assembly of a first sealing stage and the annual collar fitting over a cylindrical end region of the rotating sub-assembly of the ~~a~~-second sealing stage.

16. (Currently Amended) —The tandem gas seal assembly of claim 15, further comprising~~:~~ means for effecting a gas tight seal between the mating formations of each rotating sub-assembly of the first sealing stage and the second sealing stage.

17. (Currently Amended) —The tandem gas seal assembly of claim 13, wherein the first sealing stage is dynamically balanced separately from the second sealing stage.

18. (Currently Amedended) The tandem gas seal assembly of claim 13, wherein the first sealing stage and the second sealing stage are directly abut one another and are

retained on the rotor by means of a lock nut applying an axial force to only an outer of the first ~~second~~ sealing stage and the second sealing stage.